

5.1 Firms, costs, growth and competition

Name: _____ Class: _____ Date: _____

Total: 6 marks

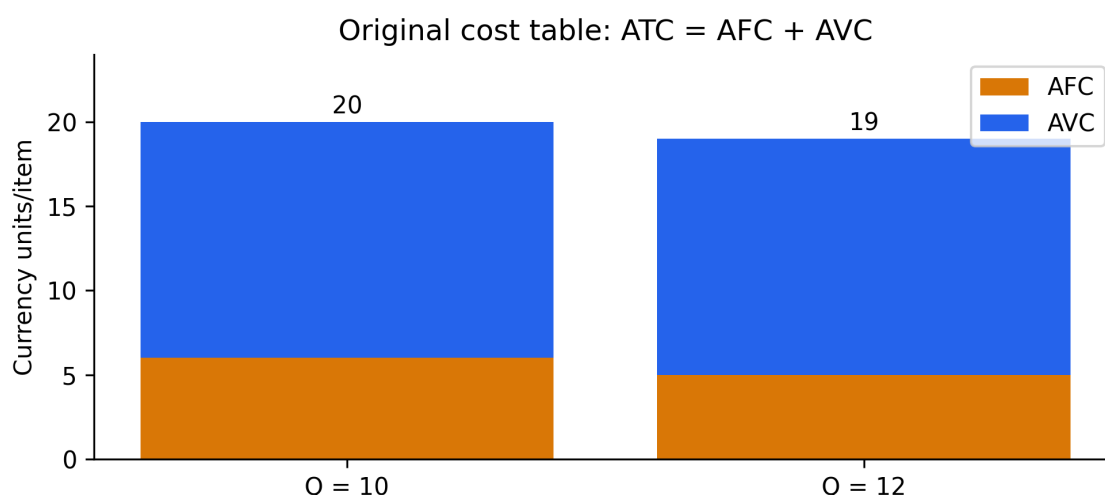
KEY WORDS fixed cost • variable cost • average cost • profit

Objective

Apply the supported native methods to original data and justify a qualified transfer conclusion.

1 Key knowledge and worked examples

Total, average and marginal measures answer different questions. Profit=total revenue–total cost. Additional output is justified in a profit-maximizing model by incremental revenue and cost, subject to relevant conditions; higher sales do not guarantee higher profit. Size, ownership and integration affect finance, control, risk and coordination. Market power and contestability require evidence about alternatives and entry, not firm size alone.



In an original short-run table, fixed cost is 60 currency units. At $Q=10$ items, variable cost is 140; at $Q=12$, variable cost is 168. Calculate costs and interpret the change.

$TC = TFC + TVC$; TC at $10 = 60 + 140 = 200$ units. $ATC = TC/Q$; ATC at $10 = 200/10 = 20$ units/item. At 12, $TC = 60 + 168 = 228$ units and $ATC = 228/12 = 19$ units/item. Interval $MC = \Delta TC / \Delta Q = (228 - 200) / (12 - 10) = 14$ units/item.

$AVC = TVC/Q = 140/10 = 168/12 = 14$ units/item. AFC falls from $60/10 = 6$ to $60/12 = 5$ units/item, lowering ATC. These are table intervals, not a claim about a smooth derivative or all output levels. Productivity and profit need their own measures.

2 Practice

2.1 For the worked case, state the method, show its application and give a limitation.^[3]

3 Exam-style questions

3.1 A firm expands through acquisition and lowers unit costs but loses customers after quality problems. Evaluate growth rather than assuming economies of scale guarantee success.^[3]

Solutions

2.1 $TC = TFC + TVC$; TC at 10 = $60 + 140 = 200$ units. $ATC = TC/Q$; ATC at 10 = $200/10 = 20$ units/item. At 12, $TC = 60 + 168 = 228$ units and $ATC = 228/12 = 19$ units/item. Interval $MC = \Delta TC / \Delta Q = (228 - 200) / (12 - 10) = 14$ units/item. $AVC = TVC/Q = 140/10 = 168/12 = 14$ units/item. AFC falls from $60/10 = 6$ to $60/12 = 5$ units/item, lowering ATC . These are table intervals, not a claim about a smooth derivative or all output levels. Productivity and profit need their own measures. Authored points for method, application and relevant qualification.

3.1 Lower long-run average cost can improve competitiveness, but revenue depends on demand and quality. Acquisition can add finance, capacity and coordination risks; integration does not automatically improve management. Compare margins, quality, customer response, entry barriers and alternative organic growth. A small niche firm may rationally remain small. Supported IAL WEC13 targets in this topic are reused; its six still-unsupported objectives and all remaining IA2 gaps stay held, rather than being inferred from this case. Authored points for judgement, case-linked reasoning and justified qualification. Accept supported alternatives.